

LENDING COSTS AND RURAL DEVELOPMENT IN AN LDC SETTING:  
IS CHEAP CREDIT REALLY CHEAP?

Douglas H. Graham  
Carlos E. Cuevas

The Ohio State University

Douglas H. Graham, B.A., M.A., Ph.D.

Professor, The Ohio State University, Department of Agricultural  
Economics and Rural Sociology, Columbus, Ohio

Assistant Professor, Department of Economics, Vanderbilt  
University, 1966-1973.

Associate Professor, Department of Agricultural Economics,  
The Ohio State University, 1973-1979.

Professor, Department of Agricultural Economics, The Ohio  
State University, 1979 to present.

Carlos E. Cuevas, B.A., M.S.

Graduate Research Associate, Department of Agricultural Economics  
and Rural Sociology, The Ohio State University, 1980 to present.

Research Associate, Catholic University of Chile, 1976-1980.

Head, Livestock Production Department, Agrarian Reform  
Institute, Chile, 1969-1973.

LENDING COSTS AND RURAL DEVELOPMENT IN AN LDC SETTING:  
IS CHEAP CREDIT REALLY CHEAP?

Abstract

The contrast in lending costs for a public and a private sector bank servicing agriculture in an LDC setting illustrates that cheap lines of credit from external donors are not cheap. Results underscore the need to reevaluate policies to make a positive contribution to institutional viability or accept permanent subsidization.

LENDING COSTS AND RURAL DEVELOPMENT IN AN LDC SETTING:  
IS CHEAP CREDIT REALLY CHEAP?

1. Introduction

The financial system of Honduras has been working under different regulatory schemes during the last decade. Recent years have been characterized by a decreasing trend in the overall level of liquidity in the system, due mainly to the growing share of the public sector in total domestic credit, a phenomenon that has imposed further constraints on the operation of the financial sector. In this environment, the operational efficiency of financial institutions becomes of crucial importance conditioning their viability and overall performance. Lending costs in particular, can be seriously affected by different policies aimed at the financial sector, especially those policies that regulate the interest rate structure and loan targeting criteria that affect the composition of the portfolio of the lending institutions. These two features have been important components of the recent Honduran policy environment.

Resource costs involved in loan operations, usually referred to as administrative (non-financial) costs of loans, can be of considerable magnitude in lending institutions dealing with agriculture, if small farmers are an important component of their clientele. These costs have been estimated to be in the range of 3 to 10 percentage points (Saito and Villanueva, World Bank) depending on the term structure of the loan portfolio and the scale of operations of the farmers receiving loans. Nyanin has estimated the average loan administration costs of the Jamaican Development Bank at 11.5% with a range between 8% and 14% over a seven year period.

In this study we document and analyze the level and structure of lending costs in two important financial institutions in Honduras, the National

Agricultural Development Bank (DB) and the largest private commercial bank in the country (PB). The two banks together accounted for 26.3% of the portfolio of new loans of the banking system in 1981, the year of the study, and granted 44.5% of the value of new loans to agriculture that same year. Loans to agriculture represented almost 70% of the portfolio of the DB. This bank accounted for 33% of the banking system's lending to the agricultural sector. The share of agricultural loans in the PB's portfolio of new loans was 14%, this bank provided 11.4% of the total value of new loans to agriculture in the year of the study.

Comparative analysis of the cost structures of these two banks yields important implications for financial policies and provides useful insights into the peculiar characteristics of the operations of public development banks. In the case of the private commercial bank, it was possible to estimate the incidence of loan size, source of funds, and end-use on the magnitude of lending costs. These results, together with those obtained for the development bank, raise serious questions concerning the rules and regulations that typically accompany special agricultural credit programs and projects, sponsored by the government and/or international donor agencies. In Section 2 we summarize the methodology utilized in the study. We present and analyze the results and their implications in Section 3. Section 4 summarizes our conclusions.

## 2. Methodology

Our study focused on the non-financial (administrative) costs of both banks. Risk-related costs such as provision for bad debt were excluded from the analysis given the different criteria applied by the accounting units of the two institutions. A representative sample of branches was selected in

both cases, accounting for 55% of the loan portfolio and for 49% of total non-financial costs in the case of the DB. These percentages were 86% and 88% respectively in the PB case.

The income-expenditure statements of the branches were the basis for our cost estimates. The identification of the expenses related directly to credit operations and the functional breakdown of these costs were based on branch-level surveys undertaken separately in both institutions. These surveys consisted of a set of questionnaires administered by the authors in interviews with branch managers, credit officials, agronomists, credit analysts, accounting personnel and clerical employees.

### 3. Results, Analysis and Implications

The main results of the study are summarized in Table 1. Rows 1 and 2 of this table characterize the distribution of total operational (i.e. non-financial) costs in each bank between lending costs associated with credit activity (row 1) and operational costs associated with deposit mobilization and other banking services (row 2). Rows 3 through 6 disaggregate and classify the lending or credit-related costs according to the level of the bank's structure at which they are generated (rows 3 and 4) and according to the conventional classification between direct and indirect costs (row 5), and stressing the different incidence of personnel costs in the two banks (row 6). The estimated levels of lending costs, both per loan and per lempira lent<sup>1/</sup> are indicated in rows 7 and 8 of Table 1. Finally, the functional breakdown of lending costs is presented in rows 9 through 12 of the same table.

Rows 1 and 2 of Table 1 show a sharp contrast between the two banks in terms of the incidence of lending costs in total costs, as compared to the

<sup>1/</sup> 2 lempiras = 1 U.S. dollar

Table 1. Level and Structure of Lending Costs,  
Commercial Bank versus Development Bank.

Criterion		Commercial Bank	Development Bank
1. Share of lending costs in overall costs	%	32.5	77.2
2. Share of deposit mobilization and other banking services in overall costs	%	67.5	22.8
3. Share of branch-level costs in total lending costs	%	77.1	43.1
4. Share of central-office-level costs in total lending costs	%	22.9	56.9
5. Share of direct costs in total lending costs	%	74.2	37.5
6. Share of personnel costs in total lending costs	%	41.1	26.8
7. Average lending costs, per loan	Lps. <sup>1/</sup>	1,748.4	260.0
8. Average lending costs, per lempira lent	%	2.53	8.36
9. Incidence of loan evaluation and analysis in total lending costs,			
Overall	%	45.0	15.5
Branch-level	%	58.3	36.0
10. Incidence of loan monitoring and supervision in total lending costs,			
Overall	%	4.3	7.1
Branch-level	%	5.6	16.5
11. Incidence of loan recovery in total lending costs,			
Overall	%	13.5	5.8
Branch-level	%	17.4	13.3
12. Incidence of branch-level record-keeping and documentation in total lending costs,			
Overall	%	8.2	5.3
Branch-level	%	10.6	12.2

Source: Income-expenditure statements and branch-level survey results.

<sup>1/</sup> 2 Lempiras = 1 U.S. dollar.

Notes: --Rows 1 and 2 add up to 100 percent.  
 --Rows 3 and 4 add up to 100 percent.  
 --The complement of row 5 constitutes indirect costs.  
 --Row 6 (personnel costs) is a component of direct costs.  
 --Rows 9 through 12 do not necessarily add up to 100 percent since other miscellaneous costs at the branch level and overall are not included in the tables.

share of deposit handling and other banking services. A majority of the PB's resources, 67.5% of total costs, are devoted to deposit mobilization and the provision of other services, while only 32.5% of its total costs can be associated with lending activities. The opposite is true for the DB, where 77.2% of its costs are credit-related whereas only 22.8% of total costs relate to deposits and other services. This acute contrast reflects the DB's greater reliance on external funds and special rediscount lines from the central bank, as compared to the PB which relies much more heavily upon financial resources mobilized from the general public. To illustrate this difference between the two banks, the shares of the main sources of funds in their loan portfolio are indicated below:

Source of Funds		Development Bank, (DB) (1980)		Private Bank, (PB) (1981)	
		No. of Loans	Loan Amounts	No. of Loans	Loan Amounts
Own Resources	%	5.9	34.7	90.0	91.0
Central Bank Rediscount	%	79.2	40.5	6.2	5.9
External Funds*	%	14.9	24.8	3.8	1.1

\* World Bank, AID, and IDB funds in the DB case; World Bank funds in the case of the PB.

These differences with respect to the banks' predominant sources of funds between the two banks underly many other contrasts observed in their cost structures, as will be discussed later.

Lending costs are generated primarily at the branch level in the case of the PB (77.1%), with only 22.9% of total lending costs being attributable to costs generated at the central-office level. Again the opposite pattern is

observed in the DB case, where 57% of its lending costs correspond to central-office resources entering the loan procedure, while 43% of lending costs are due to branch-level activities. Thus a higher degree of centralization is clearly observed in the DB case, whereas the PB cost structure reflects a different strategy of regionalization and decentralization of the decision-making process.

We conclude that the heavy incidence of special lines of credit and externally-funded projects in the development bank places most of the burden of documentation, disaggregated accounting and reporting to the funding agencies at the central-office level. Therefore, a serious constraint is being implicitly imposed on the decentralization efforts of the DB, to the extent that these recording, accounting and reporting requirements continue growing as new special credit projects enter the liability portfolio of the development bank.

Rows 5 and 6 of Table 1 show another revealing contrast between the two banks. Direct costs account for 74.2% of total lending costs in the PB, and among them, personnel costs represent 41.1% of total lending costs. The corresponding shares in the DB case are 37.5% and 26.8% respectively. These different shares denote important qualitative differences between the resources employed in the two institutions, and particularly in the area of human resources. It was expected that, given the characteristics of the DB's clientele, more numerous and in general more risky customers than that of the PB, the DB would direct more resources into the loan operation. However, even though this assumption could still hold in "physical" terms, the value of the resources directly involved is far more important in the PB case, reflecting a



higher level of investment in more expensive and better trained human resources and other direct inputs for its credit operations.

As for the level of lending costs per loan, these were estimated at a level considerably higher in the case of the PB as compared to the DB (see row 7 in Table 1). It is necessary to point out that the sample included 86% of the loan amounts, but only 64% of the number of loans, therefore the average loan amount of the sample branches is larger than that relevant for the institution as a whole. The average cost per lempira lent in the PB amounts to 2.53%, a rate that contrasts with the 8.36% obtained for the DB (row 8 in Table 1). Note that these estimates do not include provisions for bad debts, thus representing a lower bound estimate for the operational spread that these institutions would require in order not to suffer operational losses.

The results obtained for the DB are particularly striking, especially when comparing these results with the margins contemplated in credit projects funded by external agencies or the central bank. These funding sources usually only allow 3 to 4 percentage points to cover the administrative costs allegedly associated with the on-lending of their funds. Thus, to operate with these special lines of credit, the DB a priori experiences an operational loss of over 4%, assuming that all loans are fully repaid. There exists a policy inconsistency here in the sense that external donors and/or the government impose on the DB costly loan targets. The costs of servicing a more risky, more numerous, and more costly clientele, for which the institution is reimbursed only at a margin of 3 or 4 percentage points, seriously compromise the financial viability of the institution. It is interesting to note that the usual 3-4% margin is closer to the average lending costs observed in

efficient private commercial banks like the one under study here, than to the average lending costs observed in the development bank.

The functional breakdown of lending costs summarized in rows 9 through 12 of Table 1 provide some additional insights into the main factors underlying the cost differences between the two banks. The most important difference is observed in the incidence of loan evaluation and analysis in total lending costs. These are three times as high in the PB as in the DB and twice as high in the PB at the branch level. The opposite was observed for the share of loan monitoring and supervisory costs. These costs were considerably higher in the case of the DB as compared to the PB.

The foregoing observed differences in the functional structure of lending costs strongly suggest that in dealing with a more numerous and risky clientele the DB is induced to concentrate its resources in monitoring and supervisory activities rather than in the loan evaluation and analysis that precede loan approval. A factor that influences this behavior is the incidence of targeted funds in the overall volume of the DB's operations. These targeted funds typically entail widespread requirements with respect to the control, monitoring and supervision of the end-use of funds, along with explicit and implicit pressures to allocate credit into risky activities that are characteristic of supply-leading financial schemes.

Loan recovery costs stand out with a more important incidence in total lending costs in the case of the PB, as compared to the DB, even though there exist important qualitative differences between the two banks in terms of their recovery efforts. Most recovery actions undertaken by PB officials occur before the loans become three months overdue, whereas in the DB case loan recovery efforts were concentrated on loans long overdue, where the

probability of repayment could be considered slim (delinquency rates were approximately 5% for the PB, and 50% for the DB, in 1981).

Finally, Table 2 summarizes the results of an effort to estimate the PB's lending costs taking into account differences due to source of funds, end-use of the loan, and loan size. The figures reported correspond to costs per lempira lent generated at the branch level, where the basis to discriminate between different types of loans was the different amount of time spent by credit officials in handling the loan applications. For the sub-sample utilized in this exercise, central-office costs add 0.6 percentage points as an overhead cost to the branch-level costs reported in Table 2. Own resources in this table include "regular" rediscount lines of the central bank (as opposed to "special" lines) that are of rather low importance in the funding of the PB's loan portfolio, as has been illustrated before.

Table 2. Private Bank's Lending Costs (per lempira lent), at the Branch Level, According to Source of Funds, End-Use of the Loan, and Loan Size. Percentages.

Source of Funds and End-Use	Loan Size	
	Less than L.125,000	More than L.125,000
Own Resources		
Agriculture	3.13	0.28
Industry	1.32	0.23
Housing & Real Estate	7.23	0.41
Commerce	1.62	0.34
Consumption	5.64	--
Other	1.64	0.33
World Bank		
Agriculture	7.82	--

Source: Estimates based on survey results.

The results of Table 2 indicate that the two main factors that affect lending costs are the loan size, and the source of funds. Differences in costs generated by the end-use of loans are less important. Loans of a size larger than 125,000 lempiras cost less than 1% to operate (including the 0.6% central-office costs). Among those loans of less than 125,000 lempiras, funded with the bank's own resources, housing and real estate appears as the end-use with the highest administrative costs per lempira lent. Agriculture is third in order of importance, with industrial sector loans showing the lowest cost of loan servicing.

However, of particular importance is the fact that loans funded by the World Bank project are extremely costly to administer. This is due to the considerably greater amount of documentation, farm and project planning, record-keeping, supervision and reporting requirements that these loans entail for the on-lending institution. Note that if the 0.6 percentage points estimated as central-office overhead costs are added to the 3.13% branch-level costs of granting loans to agriculture with the bank's own resources, we arrive at a figure fairly close to the "traditional" 4% margin considered in externally-funded and government-funded special credit projects. However, the true administrative costs induced by these special programs will be closer to the 7.8% estimated for World Bank funds in the PB case (8.4% adding the central-office overhead costs) or the 8.36% estimated as an average for the DB where, as shown before, 94% of the loans were financed by central bank rediscount lines and external funds. Our results here suggest that the usual 4% spread allowed in these projects would only be appropriate if no additional information, monitoring, record-keeping, accounting, and reporting requirements accompanied these special lines of credit.

#### 4. Conclusions

This study has emphasized the sharp contrasts in the structure of lending costs and overall organization between a public sector and a private sector bank servicing agriculture in a less developed country. It is clear that the source of funds to these institutions plays a crucial role in determining the composition of their loan portfolio and the lending costs incurred by the banks. The private bank, relying more on locally mobilized deposits, is more cautious and efficient in evaluating and screening loans at the branch level and, in general, delegates more decision-making to the branch level in managing their portfolio. The public sector bank is far more centralized and registers a heavy overlay of administrative costs associated with loan targeting criteria imposed by external sources of finance. Important here is the fact that external donor agencies impose far higher lending costs on the on-lending institutions than they probably realize. They impose unrealistically low administrative margins to service these costs which contributes to the financial unviability of these institutions. In the end "cheap" credit programs are not cheap to the institutions required to on-lend these resources with serious consequences for their future as viable financial institutions or programs. International donors and local governments should either reconsider their low administrative cost margins policy or alter the costly features of their loan targeting criteria. Otherwise they should accept the negative consequences of subsidizing permanently the financial institutions receiving the funds.

## REFERENCES

- Bhatt, V.V. "Development Banks in the Financial System." Economic Development Institute, International Bank for Reconstruction and Development, Seminar Paper No. 15, 1979.
- Nyanin, Ohene O. "Costs of Agricultural Lending, Institutional Viability, and Lender Behavior in Jamaica." Unpublished Ph.D. dissertation, The Ohio State University, 1982.
- Saito, Katrine A., and Delano P. Villanueva. "Transaction Costs of Credit to the Small-Scale Sector in the Philippines." Economic Development and Cultural Change, 29(April 1981), 631-640.
- World Bank. Agricultural Credit. Sector Policy Paper, Washington, D.C., May 1975.

